THREE NEW PARASITIC HYMENOPTERA FROM SOUTH AFRICA.

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Prof. Charles P. Loundsbury, Government Entomologist, of Cape Town, South Africa, has recently sent to Dr. L. O. Howard, U. S. Entomologist, a lot of bred parasitic Hymenoptera for names, among which were found three new species, which, at the request of Dr. Howard, are characterized below :

Family LVII.—PLATYGASTERIDÆ.

Genus Allotropa, Förster.

(1) *Allotropa Loundsburyi*, new species.

♀.—Length, 0.9 mm. Polished black ; antennæ and legs mostly brown or brown-black, the base of the scape, pedicel, funicle joints 1 to 4, trochanters, knees, base of tibiæ, the tarsi except last joint, and the petiole of abdomen, yellow. Wings hyaline, entirely veinless, except the subcostal vein which terminates in a small knob.

The antennæ are 8- or 9-jointed, depending upon whether the enlarged antepenultimate joint is counted as a single joint or as two closely-united joints ; funicle joints 1 to 4 much slenderer than the pedicel or joints 5 and 6 of funicle, the first joint being not quite twice as long as thick, the second shorter, the first and fourth subequal, subquadrate. The abdomen elongate, conically pointed, about one-third longer than the head and thorax united, the petiole very short, wider than long, while the second segment is large and occupies about half of the whole surface of the abdomen.

♂.—Length, about 0.8 mm. Agrees well in colour with the female, but differs in having the antennæ distinctly 9-jointed, the joints being distinctly separated, the flagellum filiform, the joints oblong, with whorls of sparse long hairs, while the abdomen is oblong oval, not pointed at apex and not longer than the thorax.

Type.—Cat. No. 5727, U. S. N. M.

Hab.—Cape Colony, South Africa.

Host.—Rhynch. : *Dactylopius* sp. on Gorse.

Bred by Prof. Chas. P. Loundsbury, Oct. 22, 1898.

The Platygasterids, so far as we know, are parasitic only upon Dipterous insects, and probably this species will be found to be a hyperparasite upon a Dipteron infesting the scale insect.

Family LXVII.—Encyrtidæ.

Genus Coccidencyrtus, Ashmead.

(2) *Coccidencyrtus flavus*, new species.

♀.—Length, 0.8 mm. Golden yellow; legs yellowish white; antennal club brown; eyes brown-black. Wings hyaline, the marginal vein punctiform, not longer than thick, the postmarginal scarcely longer than the radius or stigmal vein; the stigmal vein, although comparatively short, is fully twice as long as the punctiform marginal vein and terminates in a little knob.

The flagellum is subclavate, the funicle 6-jointed, the joints submoniliform, increasing in width and size to the club, the first three or four joints being very small, narrower than the pedicel, the sixth about as wide as the pedicel, the club stouter, cone-shaped and as long as, or a little longer than, funicle joints 3 to 6 united.

Type.—Cat. No. 5728, U. S. N. M.

Hab.—Cape Colony, South Africa.

Host.—Rhynch.: *Dactylopius* sp. on Gorse. (Chas P. Loundsbury.)

Evidently the same thing, only slightly differently coloured, being more of a brownish yellow, having the sutures of the thoracic sclerites, a spot on the anterior part of the thorax and a band across the base of the abdomen, dark brown, but otherwise agreeing structurally; was bred by Prof. Loundsbury from a *Lichtensia* sp. on Pittosporum.

Family LXXI.—Eulophidæ.

(3) *Tetrastichus prospaltæ*, new species.

♀.—Length, 0.7 mm. Black (possibly polished, the specimens being mounted on a slide in balsam, and the sculpture, if any, not being noticeable); face anteriorly and the legs, except the hind femora, apparently pale yellow; hind femora brown. Wings hyaline, the tegulæ and veins pale yellowish; the front wings, from base to the origin of the marginal vein, are wholly hairless, beyond they are closely, finely hairy and ciliate at margins; the marginal vein is very slightly longer than the subcostal, while the stigmal vein is much less than its length.

Type.—Cat. No. 5729, U. S. N. M.

Hab.—Outspoorn, South Africa.

Host.—Hym. : *Prospalta aurantii*, How., infesting a *Mytilaspis* sp. on Salix Capensis.

THE LIFE-HISTORY OF THE GREENHOUSE LEAF-TYER.

(Phlyctænia ferrugalis, Hbn., = Botis Harveyana, Grt.)

BY DR. JAMES FLETCHER AND ARTHUR GIBSON, OTTAWA.

The larvæ of *Phlyctænia ferrugalis*, Hbn., have been since 1897 the cause of some loss to roses in the large houses of Mr J. H. Dunlop, Toronto. References to this occurrence will be found in the Reports of the Entomologist and Botanist to the Dominion Experimental Farms for 1899 and 1900.

On the 12th November, 1900, a visit was paid to the above houses by Mr. Gibson, and specimens of the mature larvæ found feeding both on violets and chrysanthemums were secured, as also some larvæ in other stages of development. These all changed to pupæ, and in due course the moths appeared, the pupal state lasting from 17 to 20 days.

On the 4th December six moths, which had just emerged (the whole six within three days), were placed in a muslin bag over a violet plant. On the 7th December a large number of fresh eggs were noticed. They were laid on the under side of the leaves, sometimes singly, in pairs, in rows of 3 or 4, or in clusters of from 3 to 7, placed close together and overlapping at the edges.

The following notes, describing the egg and larval stages, were made:

Egg.—0.5 mm. in width, round in outline, much flattened, slightly raised in centre, pearly white, coarsely reticulated, and, from their flattened appearance, remarkably like those of the Codling Moth. Before hatching, the black heads of the young larvæ are very apparent through the shell.

The eggs which were laid on the 7th December hatched in a warm office on the 21st December, making the duration of the egg state 14 days.

Stage I.—Length, 2 mm. General appearance, semi-translucent creamy-white larvæ, body bearing long whitish hairs. Head 0.2 mm. wide, rather flattened, horizontal, inclined to be wedge-shaped, large, deep black, shining, and bearing slender whitish hairs. Mouth-parts pale brownish. Tubercles on segments piliferous and faintly darker than body,